	0 NEAR EAST UNIVERSITY – COMMON COURSES COORDINATION UNIT

Ders Bilgi Formu / Course Information Sheet

Ders Kodu / Course Code COM100	Ders Adı / Course Name INFORMATION TECHNOLOGIES 1-2		Kredi / Credit 6	AKTS /ECTS 8

Önkoşul / Pre-requisite: NONE

Ders Dili / Language: ENGLISH	Ders Türü /Course Type: COMPULSORY	Öğretim Ortamı / Mode of Instruction: DISTANCE EDUCATION

Haftalık Ders Saati / Weekly Hours	Sınıf Saati / Class Hours	Laboratuvar / Laboratory	Uygulama / Practicum	Öğrenim Oturumları / Learning Sessions			
				PÇ / PS	P / C	D / R	Ö / T
	0	3	0	2	2	2	2

Öğrenim Çıktıları / Learning Outcomes	Bu dersin sonunda öğrenciler: After the completion of this course, the student will be able to: ► Explains the basic concepts of information technologies. ► Discusses the positive and negative aspects of different information technologies. ► Explains the basic concepts and functions of the computer system. ► Gives examples of input and output units. ► Produces solutions for technical problems faced in hardware and software. ► Realizes the importance of data management in electronic environment. ► Performs basic file and folder management operations. ► Explains the basic concepts of ethics and IT ethics. ► Respects the rights of others online. ► Understands the purposes and importance of digital citizenship applications. ► Realizes that digital identities may not reflect reality. ► Identifies the components that are important in terms of privacy. ► Discovers the journey of information between networks. ► Explains the basic concepts of computer networks and computer network types. ► Explains the formation and structure of internet addresses. ► Explains the concept of web browser and uses the browser. ► Researches at a simple level using search engines. ► Defines communication technologies and lists their types. ► Discusses the positive and negative aspects of communicating in a virtual Environment. ► Creates an e-mail account and uses it to communicate. ► Explain image file formats. ► Carries out the editing processes related to the visuals. ► Recognizes the interface and features of the word processing program. ► Formats the text in the document it creates for a specific purpose. ► Recognizes the interface and features of the presentation preparation program. ► Shapes the design and components of the presentation it creates for a specific purpose. ► Arranges the presentation it creates with the presentation preparation program. ► Brings solutions to the problems encountered in daily life. ► Solves a given problem using appropriate steps. ► Explains the concept of algorithm. ► Develops an algorithm for the solution of a problem. ► Explains the basic concepts of programming. ► Explains the basic concepts of information technologies. ► Discusses the changes of information technologies over time. ► Recognizes the innovations that can be made by using information technologies.

	► Describes interdisciplinary careers developed by computer science.
	► Discusses ethical and unethical behavior in the use of information and technology.
	► Evaluates the importance of intellectual property rights.
	► Discusses the individual and social effects caused by privacy and security problems.
	► Explains threats to information security and privacy.
	► Evaluates the security level of various environments.
	► Describes the measures that can be taken against structures that can pose a threat to security.
	► Separates a problem into sub-problems.
	► Designs different algorithms to solve a problem.
	► Creates the flow chart of the designed algorithm.
	► Tests the designed algorithm and debug errors.
	► Reveals the relationship between algorithm design and programming language.
	► Recognizes the interface and features of the programming tool.
	► Converts the algorithm developed to solve a specific problem into an error-free program.
	► Creates a syntax suitable for a given problem.
	► Tests and extracts a given syntax.
	► Uses variables for solving the problem.
	► Uses conditional statements to solve the problem.
	► Uses loops for the solution of the problem.
	► Uses functions for solving the problem.
	► Develops a unique product for the solution of a particular problem.
	► Creates presentations using graphics and animations for a specific purpose.
	► Designs a mind map for a specific purpose.
	► Develops graphs and information graphics consisting of numerical data.
	► Designs a poster using a poster creation program.
	► Creates a product using page design programs.
	► Produces collaborative projects.
	► Explains the basic concepts of animation.
	► Creates the scenario of the animation with the help of storyboards.
	► Recognizes the interface and features of the animation program used.
	► Creates animation for a specific purpose.
	► Explains the basic concepts of three-dimensional design.
	► Recognizes the interface and features of the three-dimensional design program used.
	► Makes simple three dimensional drawings.
	► Makes model design.
	► Develops original design product for a specific purpose.
	► Describes three-dimensional printers and areas where three-dimensional printers are used.
	► Share the product developed by using collaborative working Environments.
Ders Tanımı / Course Description	The course is offered to all faculties as a general common course. It involves using modern and basic information technologies effectively.
Dersin Amaçları / Course Objectives	1. Being individuals who understand technological concepts, systems and processes as digital citizens, 2. Using information technologies effectively and in accordance with the purpose, 3. Access, research and use of Internet-based services, 4. To create a general understanding and technical knowledge about computer science, 5. To acquire and develop problem solving and computational thinking skills, 6. To follow and evaluate the reasoning process, 7. As a part of the learning process, they acquire collaborative working skills, make use of social environments and share what they have learned, 8. Searching for learning opportunities on the internet, 9. To be able to express their verbal and visual expression by developing an understanding of the algorithm design,

		10. Selecting and applying the appropriate programming approach to solve problems, 11. Creating technical knowledge on programming, 12. Being able to use at least one of the programming languages, 13. Carrying out studies on product design and management, 14. Developing innovative and original projects for the solution of the problems encountered in daily life, 15. Aims to gain awareness about lifelong learning.
Kullanılan Materyaller / **Textbooks and/or References**	1	Course materials shared on UZEM
	2	Uzunboylu, H. (ed.) (2017). Information technologies. Ankara: Pegem Academy Publishing.
Ders İçeriği / **Course Content**		1. The Place of Information Technologies in Daily Life 2. Computer Systems, File Management 3. Ethics and Security, Digital Citizenship 4. Privacy and Security 5. Computer Networks 6. Research 7. Communication Technologies and Collaboration 8. Visual Processing Programs 9. Word Processor Programs 10. Presentation Programs 11. Spreadsheet Programs 12. Audio and Video Processing Programs 13. Problem Solving Concepts and Approaches, Programming 14. Information Technologies in Daily Life importance 15. Information Technologies in Daily Life importance 16. Ethical values 17. Privacy and Security 18. Problem Solving Concepts and Approaches 19. Problem Solving Concepts and Approaches 20. Programming 21. Programming 22. Presentation and Visualization Programs 23. Creating Two-Dimensional Animation 24. Creating Two-Dimensional Animation 25. Three Dimensional Design Programs 26. Three Dimensional Design Programs